



MEMORANDUM OF AGREEMENT  
BETWEEN THE  
GODDARD SPACE FLIGHT CENTER (GSFC)  
AND THE  
JET PROPULSION LABORATORY (JPL)  
CALIFORNIA INSTITUTE OF TECHNOLOGY  
FOR MUTUAL SUPPORT TO  
-MANNED AND UNMANNED MISSIONS

Approval for GSFC:

  
Dale L. Fahnestock  
Director of Mission Operations  
and Data Systems/Code 500  
Goddard Space Flight Center

1/11/94  
Date

Approval for JPL:

  
Norman R. Haynes  
Assistant Laboratory Director  
Telecommunications and Data  
Acquisition/Code 400  
Jet Propulsion Laboratory

2/8/94  
Date

MEMORANDUM OF AGREEMENT  
BETWEEN THE  
GODDARD SPACE FLIGHT CENTER (GSFC)  
AND THE  
JET PROPULSION LABORATORY (JPL)  
CALIFORNIA INSTITUTE OF TECHNOLOGY  
FOR MUTUAL SUPPORT TO  
MANNED AND UNMANNED MISSIONS

1. Purpose

This Memorandum of Agreement (MOA) establishes the roles and responsibilities of the GSFC and the JPL for mutual communications, tracking, and data acquisition support to Shuttle and Expendable Launch Vehicle (ELV) missions and payloads.

2. Authority

The support included in this MOA is authorized by the following:

- a. NMI 2520.1 NASA Communications System Acquisition and Management
- b. NMI 8430.1 Obtaining the Use of Office of Space Communications (OSC) Capabilities for Space, Suborbital and Aeronautical Missions
- c. NMI 8610.10 Management of Operational Support Requirements for Manned Flight Missions

3. References

In addition to the documents cited as Authority, paragraph 2., documents of primary influence on this MOA are:

- a. Interface Control Document MDOD-1 ICD/0182 between the Jet Propulsion Laboratory and the Goddard Space Flight Center for GSFC Missions Using the Deep Space Network.
- b. Space Shuttle Program Flight Program Requirements Document/Program Support Plan.
- c. Space Shuttle Program Launch and Landing Program Requirements Document/Program Support Plan.

- d. Operations Interface Procedures Between the Goddard Space Flight Center, Network Control Center, and the Deep Space Network, Operations Control Center (534-OIP-NCC/DSN NOCC)
- e. Operations Interface Procedures Between the Goddard Space Flight Center Project Operations Control Center and the Jet Propulsion Laboratory Network Operations Control Center (POB-30IP/0184)

#### 4. Scope

This MOA defines the responsibilities of the GSFC and the JPL for mutual communications, tracking, and data acquisition (CT&DA) support of Shuttle and ELV missions and payloads. Responsibilities defined in this MOA include Management, Configuration Control, Support Requirements, Scheduling, and Logistics.

#### 5. Background

GSFC's primary role is the CT&DA of launch and orbital support of Shuttle and ELV missions. JPL's role is the CT&DA of primarily deep space and highly elliptical missions and, secondarily, of low earth orbiting unmanned missions. The facilities of GSFC and JPL can, in some instances, perform functions required by the other. GSFC currently provides prelaunch, launch and early mission support for some Deep Space Network (DSN) supported missions. JPL routinely provides launch and on orbit support for non-TDRSS compatible GSFC missions. Both JPL and GSFC provide contingency and emergency support for earth orbit mission as requested. Additionally, each party currently has facilities installed at each other's sites.

#### 6. Management Interfaces

The following are the Offices of Primary Responsibility (OPR) for the management and implementation of this MOA:

The GSFC OPR's are:

Technical OPR: GSFC/Networks Division/Code 530.  
Administrative OPR: GSFC/Flight Mission Support Office/  
Code 501.

The JPL OPR for both Technical and Administrative purposes is the Office of TDA Mission Support and DSN Operations/Code 440.

## 7. Responsibilities

### a. JPL Responsibilities:

- (1) DSN management, including technical and operational direction, for the DSN is a JPL responsibility.
- (2) JPL will initiate, at least semiannually, bilateral discussions with GSFC concerning any planned configuration changes to JPL systems, in either hardware or software, which may impact JPL support of GSFC missions or the manner of communications as defined in the Interface Control Document MDOD-1 ICD/0182.
- (3) For manned missions and shuttle payloads, mission requirements will be submitted to the GSFC Requirements and Response Manager via Mission Requirements Request for insertion into the Program Requirements Document. For unmanned missions, requirements will be submitted to the appropriate GSFC Mission Support Manager/Mission Operations Manager for insertion into the Detailed Mission Requirements.
- (4) JPL will provide GSFC with requests for support in accordance with the current scheduling guidelines as detailed in the current Operations Interface Procedures Between the Goddard Space Flight Center, Network Control Center, and the Deep Space Network Operations Control Center (534-OIP-NCC/DSN NOCC).
- (5) JPL will provide logistics support for JPL unique equipment located at selected GSFC sites.

### b. GSFC Responsibilities:

- (1) Management, including technical and operational direction, for the Spaceflight Tracking and Data Network (STDN) and the NASA Communications Network (Nascom) is a GSFC responsibility.
- (2) GSFC will initiate, at least semiannually, bilateral discussions with JPL concerning any planned configuration changes to GSFC systems, in either hardware or software, which may impact GSFC support of JPL missions or the manner of communications as defined in the Interface Control Document MDOD-1 ICD/0182.
- (3) Mission requirements will be submitted to JPL via Mission Requirements Request, Detailed Mission Requirements, Program Requirements Document, Payload Integration Plan and respective annexes.

The GSFC Requirements and Response Manager will receive requirements for DSN resources, obtain a commitment from the DSN, and respond to requestors for requirements for DSN support for Shuttle, Shuttle payloads, and other assigned missions.

- (4) GSFC will provide JPL with requests for support in accordance with the current scheduling guidelines as detailed in the current Operations Interface Procedures Between the Goddard Space Flight Center Network Control Center, and the Deep Space Network Operations Control Center (534-OIP-NCC/DSN NOCC).
- (5) GSFC will provide logistics support for GSFC unique equipment located at JPL sites in addition to the general logistics provided by GSFC to the DSN sites.

8. Funding

Both parties agree to conduct their respective responsibilities with regard to this MOA at no cost to the other party.

9. Administration

- a. This Agreement shall become effective on the date of the last signature affixed to this MOA. This Agreement may be modified at any time upon written approval of both GSFC and JPL.
- b. This Agreement supersedes and deletes:
  - (1) The Management Plan Between the Goddard Space Flight Center/National Aeronautics and Space Administration and Jet Propulsion Laboratory/California Institute of Technology for the 26-Meter Subnet Mission Support, dated February 28, 1989;
  - (2) Memorandum of Understanding for the Support of the Jet Propulsion Laboratory by the Goddard Space Flight Center Merritt Island, Florida, Spaceflight Tracking and Data Network Station, dated December 1981.
- c. This Agreement shall be reviewed biennially and as required by both GSFC and the JPL to determine the need for continuation, modification, or termination.

- d. The termination of this Agreement shall be 6 years from the date of the last signature affixed to this MOA, unless extended in writing by mutual consent of both parties. This Agreement may be terminated at any time by mutual consent of both parties or by either party with at least a 180-day advance written notice.